

SETS A NEW MARK

VALUE OF CORN CROP OF 1904
BREAKS ALL U. S. RECORDS

WOULD MORE THAN PAY NATIONAL DEBT

Value of All Products of the Farm
This Year Greater Than the Output
of all the Gold Mines in the World
Since Discovery of America.

WASHINGTON: The secretary of agriculture has transmitted his 8th annual report to the president.

In opening his report the secretary enumerates some of the important features of the year's work. Among them are extensive co-operation with agricultural stations; the taking of the preliminary step to conduct feeding and breeding experiments; the war waged against the cotton boll weevil and against cattle mange; plans for education of engineers in road building; the production of a hardy orange, a hybrid of the Florida orange and the Japanese trifoliate; valuable research in successful shipping of fruit abroad; the value of nitrogen-fixing bacteria; successful introduction of plants suited to light rainfall areas; establishment of pure food standards; the extension of agricultural education in primary and secondary schools; the extension of instruction to our island possessions to enable them to supply the country with \$200,000,000 worth of domestic products, now imported from abroad.

He then proceeds to discuss the place of agriculture in the country's industrial life.

Corn is King in United States.

The corn crop of 1904 yields a farm value greater than ever before. The farmers could from the proceeds of this single crop pay the national debt, the interest thereon for one year, and still have enough left to pay a considerable portion of the government expenses for one year. The cotton crop, valued for lint and seed at \$600,000,000, comes second, while hay and wheat contend for the third place. Combined, these two crops will about equal in value the corn crop. Notwithstanding the wheat crop shows a lower production than any year since 1903, the farm value is the highest since 1881. Potatoes and barley reached their highest production in 1904, save in 1902 the oat crop was never so large by 60,000,000 bushels. The present crop of rice promises a yield of 900,000,000 pounds—200,000,000 more than ever before.

Horses and mules reach the highest point this year, with an aggregate value exceeding \$1,354,000,000. On the other hand cattle, sheep and hogs all show a slight decline.

The steady advance in poultry leads to some astonishing figures. The farmer's hens now produce 1% less than a dozen years ago, and at the high average price of the year the hens during their busy season lay enough eggs in a single month to pay the year's interest on the national debt.

1904 Crop Worth Five Billions

After a careful estimate of the value of the products of the farm during 1904, made within the census scope it is safe to place the amount at \$4,900,000,000 after excluding the value of farm crops fed to live stock in order to avoid duplication of values. This is 9.65 per cent above that of the census year 1899.

Some comparisons are necessary to the realization of the unthinkable value aggregating nearly \$5,000,000,000. The farmers of this country have in two years produced wealth exceeding the output of all the gold mines of the entire world since Columbus discovered America. This year's production is six times the amount of

banks, it lacks but \$750,000,000 of the value of the manufactures of 1900, less the cost of materials used; it is three times the gross earnings from the operations of the railways, and four times the value of all minerals produced in this country.

Reviewing the increase in farm capital, the secretary estimates it conservatively at \$2,000,000,000 within four years—this without recognizing the marked increase in the value of land during the past two years. The most startling figures shown as illustrating the farmers' prosperity are those presented by deposits in banks in typical agricultural states. The secretary selects for this illustration, Iowa, Kansas and Mississippi. Taking all kinds of banks, national, state, private and savings, the deposits increased from June 30, 1896, to October 31, 1904, in Iowa, 164 per cent; in Kansas, 219 per cent, and in Mississippi 301 per cent—in the entire United States 91 per cent. A similar favorable comparison may be made as to the number of depositors.

The secretary concludes that the farmers' rate of financial progress need fear no comparison with that of any other class of producers.

Long Range Weather Forecasts

While expressing that hope that the time will come when it will be possible to forecast weather for coming seasons, that time has not yet arrived, and the secretary utters a warning on the subject.

Besides safeguarding the live stock industry at home, the department is fostering the foreign trade. The total export of animal products in the past fiscal year exceeded \$223,000,000. The total inspections for export were 790,496 cattle, 534,850 sheep and 3,293 horses. There was a great increase in the number of cattle and sheep exported, but a considerable reduction in the number of horses. The loss on cattle in transit to British ports was but 0.17 per cent, and on sheep 0.94 per cent. Clearances of vessels carrying live stock numbered 774.

The inspection of import animals calls for the utmost vigilance in order to prevent the introduction of animal diseases. Importations of pure bred animals were light, but a very large number were imported from Mexico for breeding purposes.

Inspection of animals and their products was maintained at fifty-one establishments in cities; of ante-mortem inspections about 65,000,000 were made, and of post-mortem 40,000,000, an increase in both cases over the previous year. The microscope inspection of pork is restricted to that destined for countries requiring it, and the number of carcasses inspected in 1904 was 313,445, of which 2,643 were found to be trichinous.

The secretary devotes considerable space to deporting on the successful conflict waged against cattle scab and mange by operation of the state authorities. During the first nine months of the year, in thirty-four states and territories, nearly 4,000,000 head were inspected, and 168,203 were found affected by the disease, while 300,000 were found to have been exposed to it. The total number of cattle dipped during this period exceeded 420,000. This work very considerably increased the expenses of the bureau.

Tuberculosis in Cattle

Experiments recently reported upon by the bureau of animal industry show conclusively that it is an error to conclude that cattle cannot be infected with human tuberculosis. The secretary urges the necessity of a rigid enforcement of the public regulations looking to the control and eradication of this disease in cattle. The bureau distributed 74,000 doses of tuberculin in 1904. The black-leg vaccine for cattle distributed by the bureau continues to give satisfaction. During the year 1,000,000 doses of this vaccine were issued, and over 10,000 persons reported highly satisfactory results. The number of an-

imals that died after vaccination was reduced to the very low figure of 0.44 per cent of the number treated.

Cultural Work on Cotton

Special work has been done on cotton with a view to bringing home to farmers of Texas and Louisiana, especially in the boll weevil districts, the advantages of better methods of cultivation and the value of early maturing seed.

The bureau of plant industry has had the advantage of closest co-operation with the Texas agricultural college, and also with the Louisiana authorities. As a feature of the work in the south diversification farms were established at various places with a view to showing the value and importance of diversified agriculture. The business interests in the respective communities gladly co-operate in this matter with the bureau, so that they involve but a trifling expense to the government. Thirty-two of these farms have been or are about to be established. Extensive work has been inaugurated in Texas with a view to breeding new types of cotton better adapted to meet the conditions brought about by the invasion of the new cotton boll weevil. Reference is made to the discovery of the Guatemalan ant by an officer of the bureau and to the transfer of the study and distribution of this ant to the bureau of entomology. Mention is also made of an effort to combat the boll weevil by producing a variety of cotton not subject to injury by this pest.

The secretary believes it to be within the range of possibility that resistant varieties of cotton may be found in tropical America or developed by selection. As a feature of the work in Texas a special effort has been made to obtain information as to the best methods of combating the cotton rot, a disease which has been very serious the past season.

Considerable advances have been made in the forage crop work. More attention has been given to alfalfa in the eastern half of the United States in the past two years than to any other crop. The department has demonstrated that this valuable crop can be grown in almost every state in the union. A large amount of information has been gathered in the past year as to the carrying capacity of the ranges in various parts of the west. Intelligent management will bring the ranges back to their primitive state of productiveness, but it is definitely demonstrated that there is no chance of improving range conditions except where stockmen are able to control the ranges upon which their stock feed. It has also been demonstrated that many new plants may be introduced upon the range successfully. Plants that may be grown upon alkali lands have been studied.

Investigations of standard grasses have been carried on, and it is hoped that within a few years it will be possible to offer farmers small quantities of seed of improved forms of all the standard grasses. A considerable number of native American grasses have shown themselves adapted to the regions where at present hay grasses are wanting. It is believed that hay grasses can be found on the western plains where the average annual rainfall does not exceed fifteen inches.

No less than 1,429 selected kinds of seeds and plants were introduced from foreign countries and established in the United States. These included 359 date suckers, representing forty-two varieties, nineteen varieties of grapes from Russian Caucasus, thirty-three varieties of mangoes of recognized superiority from Central India, 2,000 pounds of the famous new barley from Moravia, 20 trees of the hard Valadmir cherry from Russia (distributed in the north west), and many others.

In the congressional seed distribution constant effort is being made toward the improvement of methods of securing and handling the seeds. Every effort is made to improve the quality of the seed and to encourage home seed growing. In the handling of this enormous work which congress

puts upon the department the necessity for strict business methods has been fully observed. The work of handling one branch only of this problem involves securing more than twenty-five car loads of special seed and the testing, packing and mailing of this large quantity to all parts of the United States. The systematizing of all operations has been so perfected that there is little or no friction at present.

Experiments With Borax in Food

The secretary devotes considerable space in this report to discussing the experiments with borax in food. As a result of extended experiments conducted in the bureau of chemistry, he concludes that the argument that small quantities of deleterious substances may be used without harm is not logical, nor can it be based on the results of the experiments which have been made. The logical conclusions deduced from the data obtained is that the use of boric acid and equivalent amount of borax should be restricted to those cases where the necessity therefor is clearly manifest, where it is shown that other methods of food preservation are not of applicable, and that the use of such a preservative would be less harmful than the effects produced by the foods themselves by reason of decomposition.

The value of both borax and boric acid as remedies in medicine cannot be denied, but the secretary contends that the fact that any remedy is useful in disease does not logically warrant its use at any other time. His final conclusion is that both boric acid and borax continuously administered in small doses for a long period create disturbances of appetite of digestion and of health.

The football season is ended for this year. Now if they will please quit raising the price of meat good cheer may be expected to prevail.

That Pennsylvania man who married a widow after a platonic friendship of twenty-five years must now admit that the elder Weller was right.

This sudden thrusting of the tempests into public notice is causing a great many busy people to drop everything and run to their cyclopedias.

"Every mail brings Nan Patterson offers of marriage." And still there are people who affected not to believe in Max Nordau's theory of degeneration.

From the revelations in the matter of the failure of a "women's broker" it would seem that the sucker that is born every minute has a dear little twin sister.

The people of New York might pay off their public debt by holding court in Madison Square Garden and charging admission the next time a chorus girl is tried for murder.

A scientist says that pumpkin pie is filled with microbes. That is better than having the microbes filled with pumpkin pie, for there wouldn't be any left for the rest of us.

John W. Gates was in an automobile accident in New York the other day. The car upset and the chauffeur was seriously hurt. Nothing happened to Gates. Nothing ever does.

A Philadelphia society girl actress has gone to work as a cook. There are a battalion of other society girl actresses who, if they can't cook at all, can at least cook as well as they can act.

Made Him Crazy.

A man has recently been sent to an insane asylum at London because his mind gave away after he had tried to solve several newspaper puzzles.

One cat in a farmhouse will do very well, but where a half dozen are kept there is sure to be griz.